## High dose chemotherapy offers little benefit in breast cancer

Abi Berger, BMJ

The use of high dose chemotherapy with bone marrow rescue for women with breast cancer seems to offer little improvement in outcome compared with standard chemotherapy.

Early, disappointing, results from international trials were presented at the 35th annual meeting of the American Society of Clinical Oncology in Atlanta, Georgia, last week. In the United States, high dose chemotherapy, followed by autologous bone marrow or stem cell rescue, has become almost standard treatment for women with high risk breast cancer. This approach has been adopted despite a lack of evidence showing that this more toxic procedure confers any significant benefit over the use of standard dose chemotherapy.

In the United Kingdom, the only centres offering women the opportunity to try such treatment are those involved in two multicentre trials, which have yet to report their findings.

Early results from four studies now seem to cast doubt on the use of high dose chemotherapy, but a fifth, small study showed an overall survival benefit when a high dose regimen was compared with standard dose chemotherapy. According to Michael Dixon, a surgeon at the Western General Hospital in Edinburgh, "these results are disappointing, but it's too early to judge."

Two of the five studies presented at the meeting examined the use of a high dose regimen in women with metastatic breast cancer. The other three studies involved women with breast cancer that had spread to at least 10 axillary lymph nodes. High dose chemotherapy (sometimes up to 30 times more potent than conventional doses of chemotherapy) may offer a better chance of eradicating the cancer but it is fatal if used without bone marrow rescue because it destroys the patient's bone marrow.

The largest of the randomised trials, which included 783 women and was conducted by Dr William Peters and his colleagues from Duke University in North Carolina, found that a woman who has been treated with high dose chemotherapy (and bone marrow rescue) has about a 68% chance of being alive and free of cancer at three years, compared with a 64% chance for a woman who has had intermediate dose chemotherapy. In addition, 7.4% of the deaths in the high dose group were associated with the

treatment, but none of the deaths in the comparison group was, and no differences in quality of life were detected between the two groups at one year. Most of the deaths attributed to the high dose treatment were associated with lung toxicity caused by the chemotherapy regimen.

"The results from the Peters trial indicate a trend only, and that's all that can be expected at this early stage," said Karen Antman, from Columbia University, New York. "The data are interesting, but inconclusive; any real differences are likely to start appearing after at least three to five years," she said.

The smaller Scandinavian Breast Cancer Study Group, which included 525 women and was led by Dr Jonas Bergh, presented similar results. Recruitment of women into this trial began in 1994 and the median follow up time to date is 20 months. But this trial compared high dose chemotherapy, with "tailored" chemotherapy—that is, the doses of chemotherapy that were given were as high as possible without destroying marrow.

"This trial effectively compared two high dose regimens, rather than a high dose regimen with a standard regimen," said Bob Leonard, from Edinburgh, who is coordinating the two large UK trials. "They are comparing like with like, not high dose with standard dose."



Bone marrow: high dose chemotherapy plus bone marrow rescue does not increase breast cancer survival time

## Time to devolve the *BMJ*?

Tony Delamothe, BMJ

The *BMJ* should be as international as possible while attempting comprehensive coverage of

what happens in Britain, within a single edition.

This was the majority opin-

ion of an online questionnaire that ran for a fortnight following the *BMJ's* special devolution issue (1 May).

Of the respondents, two thirds lived in the United Kingdom and nearly half were BMA members. An editorial in the devolution issue had asked how the *BMJ* might avoid becoming the *English Medical Journal*, and readers of both the paper and electronic editions of the journal were encouraged to vote on a range of options (see box for results).

## BMJ questionnaire on devolution: final results

- 1. The BMJ should:
- Become a genuinely international journal, treating Britain like any other country. (45 votes)
- Be as international as possible but recognise that it is British and attempt comprehensive coverage of what happens in Britain. (126)
- Concentrate on Britain, with only passing reference to other countries. (8)
- Be entirely British, ignoring the rest of the world. (1)
- 2. Assuming for this question that the *BMJ* will pay more attention to Britain than the rest of the world, the *BMJ* should:
  - Attempt comprehensive coverage of all four countries of the United Kingdom in one edition. (144)
  - Produce different editions for each country of the United Kingdom. (14)
  - Concentrate on what happens in England, drawing out similaries and contrasts in the other countries of the United Kingdom. (0)

